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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,529	03/02/2004	Takashi Oda	040302-0385	2757

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EXAMINER

PATTERSON, MARC A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

**Office Action Summary**

Application No.

10/790,529

Applicant(s)

ODA ET AL.

Examiner

Marc A. Patterson

Art Unit

1772

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/2/04, 8/17/04, 3/3/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 9 and 11 – 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Zaima et al (European Patent 0885937).

With regard to Claims 1 – 2, Zaima et al disclose a resin composition (page 2, line 11) comprising a compound (reactive particle; page 2, line 42) which is oxidized (page 4, line 41) and has a hydrophobic group on the surface thereof (hydrophobic group which is a free functional group; page 2, lines 43 – 56) and a polar group on the surface thereof (free functional group comprising hydroxyl; page 2, lines 43 – 56); the compound is an additive to a resin composition; (page 2, lines 14 – 15) and Zaima et al disclose that resins include thermoplastic resins and thermosetting resins (page 2, lines 11 – 13); Zaima et al therefore disclose a compound that is an additive to a thermoplastic resin.

With regard to Claims 3 – 6, the polar group disclosed by Zaima et al includes a group other than hydroxyl (amino group; page 3, line 3).

With regard to Claim 7, the hydrophobic group comprises alkyl (page 2, line 56).

With regard to Claims 8 – 9, a length of the oxidized compound is 1 nm and 380 nm or less (page 4, lines 16 – 19).

With regard to Claim 11, the thermoplastic resin includes acrylic resin (page 3, line 44).

With regard to Claim 12, the thermoplastic resin is polycarbonate resin (page 3, line 51).

With regard to Claim 13, the oxidized compound comprises silica (page 4, line 5).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaima et al (European Patent 0885937).

Zaima et al disclose a resin composition comprising a compound as discussed above.

Zaima et al fail to disclose the compound in the amount of 1 to 60% by weight. However, Zaima et al teach the use of the compound to provide improved characteristics (page 2, line 15).

Therefore, one of ordinary skill in the art would have recognized the utility of varying the amount of the blend to obtain the desired melt flow rate. Therefore, the characteristics would be readily determined by through routine optimization of the amount by one having ordinary skill in the art depending on the desired use of the end product as taught by Zaima et al.

It therefore would be obvious for one of ordinary skill in the art to vary the amount in order to obtain the desired characteristics, since the characteristics would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Zaima et al.

ANSWERS TO APPLICANT'S ARGUMENTS

5. Applicant's election with traverse of Claims 1 – 13 in the reply filed on May 3, 2006 is acknowledged. The traversal is on the ground(s) that Group II requires the particulars of Group I and that Group IV is not mutually distinct from Group I. This is not found persuasive because a thermoplastic resin is not required for Group II and a composition is mutually distinct from a vehicle part, as the composition may be used to make a coating, rather than a vehicle part.

The requirement is still deemed proper and is therefore made FINAL.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc A. Patterson* 6/26/06  
Marc A. Patterson, PhD.  
Primary Examiner  
Art Unit 1772